

Report No. 9

REPORT ON
THE SHORTAGES OF DENTAL PERSONNEL
IN NORTH CAROLINA

North Carolina
Legislative Research Commission

Raleigh

1967

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Introduction

An unnumbered House resolution adopted June 15, 1965, directed this Commission to study "matters relating to the current shortages existing in technical or professional personnel in the field of medical services and the projected needs of the State in this field." The study was to include information regarding dental hygienists and dental assistants as well as other health career programs. (See Appendix B)

The Commission undertook the dental auxiliary phase of the study by requesting information from appropriate persons, agencies, organizations and associations connected with dental services. Hearings were held by a subcommittee of the Commission (See Appendix D) and some presentations were made before the full Commission. The subcommittee toured the facilities of the School of Dentistry at the University of North Carolina at Chapel Hill.

The Commission adopted the report of the subcommittee (See Appendix C) and made the following findings and recommendations with regard to shortages of dental personnel in North Carolina.

Findings

There is and will continue to be an unprecedented demand for dental care services in North Carolina.

It is the duty of the State to insure that trained dental personnel are available to meet the needs. There are at present no programs in North Carolina to prepare dental personnel other than at State-supported institutions. Training is offered at the University of North Carolina at Chapel Hill and at some units of the Community College System.

There are critical shortages of dental hygienists and dental assistants in the State. The shortage of dental laboratory technicians does not appear to be critical at the present time.

A most acute need is for the education and training of instructors to train dental auxiliaries, since it is only with the increased capacity and number of facilities staffed with adequately prepared instructors that the shortages of dental hygienists, dental assistants, and dental laboratory technicians can be met.

The only facility in the State which is now preparing personnel to train dental auxiliaries is the Dental School at the University of North Carolina at Chapel Hill. Expansion of the training programs there will be accomplished by the planned construction of a Dental Education Wing. Because of insufficient funds, one floor of the building as originally

designed has been eliminated and the training program plans have been correspondingly reduced. The Commission finds that in order to meet the dental education needs of the State, additional funds are needed to restore the floor to the building.

Recommendations

We recommend:

1. That the General Assembly provide continued financial support for the existing university, senior college, community college, and technical institute programs for the training of dental hygienists, dental assistants, and dental laboratory technicians.
2. That the General Assembly provide \$1,100,000 to construct and equip the fourth floor of the Dental Education Wing to be built at the School of Dentistry at the University of North Carolina at Chapel Hill, in order to accomplish expansion of the following programs:
 - (a) dental auxiliary training;
 - (b) auxiliary instructors' training;
 - (c) continuing education of practicing dentists
 - (d) graduate training in dentistry.

Appendix A

Draft of Bill Appropriating \$1,100,000 to the University of
North Carolina for the Fourth Floor of the Dental Education Wing

A BILL TO BE ENTITLED AN ACT TO MAKE AN APPROPRIATION TO THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL TO CONSTRUCT AND EQUIP A FOURTH FLOOR IN THE DENTAL EDUCATION WING AT THE SCHOOL OF DENTISTRY.

The General Assembly of North Carolina do enact:

Section 1. There is hereby appropriated to the University of North Carolina at Chapel Hill out of the General Fund of the State the sum of one million one hundred thousand dollars (\$1,100,000) to be expended for the purpose of constructing and equipping a fourth floor in the Dental Education Wing at the School of Dentistry. This floor is to be used for the expansion of programs for dental auxiliary training, auxiliary instructors' training, continuing education of practicing dentists, and graduate training in dentistry.

Sec. 2. All laws and clauses of laws in conflict with this Act are hereby repealed.

Sec. 3. This Act shall become effective upon its ratification.

Appendix B

HOUSE RESOLUTION

A HOUSE RESOLUTION DIRECTING THE LEGISLATIVE COUNCIL OR ITS SUCCESSOR TO
STUDY MATTERS RELATIVE TO SHORTAGES IN MEDICAL PROFESSIONS.

Be it resolved by the House of Representatives:

Section 1. The Legislative Council or its successor is hereby directed to study matters relating to the current shortages existing in technical or professional personnel in the field of medical services and the projected needs of the State in this field. The study shall include information regarding nursing programs, medical records technicians, dental hygienists, dental assistants, X-Ray technicians and other health career programs. The findings and recommendations of such study shall be reported to the 1967 General Assembly.

Sec. 2. This Resolution shall become effective upon adoption.

[Adopted by the House of Representatives June 15, 1965.]

(Introduced By: Mr. Johnson of Duplin)

Appendix C

Report of the Subcommittee Assigned to Study Shortages in
Dental Personnel

TO: THE LEGISLATIVE RESEARCH COMMISSION

FROM: SENATOR THOMAS W SEAY, JR. AND SENATOR FRED M. MILLS, JR.
CHAIRMAN AND CO-CHAIRMAN APPOINTED TO STUDY THE FOLLOWING
RESOLUTION:

A HOUSE RESOLUTION DIRECTING THE LEGISLATIVE COUNCIL OR
ITS SUCCESSOR TO STUDY MATTERS RELATIVE TO SHORTAGES IN
MEDICAL PROFESSIONS.

Hearing held April 16, 1966

All of the testimony heard indicates there will be an unprecedented demand for dental care services. Every indication is that the Federal government will expand its medicare program to include dental services for children up to 6 years of age. Also the prepaid insurance programs now under consideration will increase the demand for dental services. The Public Health program in the schools is creating an awareness of the need for dental care for all of our school children. The increase in the number of pupils is evident. It is the duty of the State to provide trained personnel to meet the need of all the fields concerned. Too little has been done to provide this type of personnel not only in North Carolina but in the entire country. There is no lack of qualified candidates for the training facilities available.

It is very obvious that there are no facilities other

than state supported institutions to prepare these people for work in the dental health field. There is no prospect that private schools will enter into these fields in this State. The burden is directly on the Dental School at the University of North Carolina and with the Department of Community Colleges, Vocational Technical Division. From all available information received, the acute shortage lies in the absence of any training facilities for instructors in the field of dental hygienists, dental assistants and laboratory technicians. Further that in the United States today, no school exists in which to prepare trained qualified instructors. These instructors must have not only the unique technical skills in this field but also the necessary education to meet the standards required by the various accrediting agencies. Presently, qualified instructors are being secured from retiring military personnel, but it can be easily recognized that this is a very limited source. To establish a school to train these instructors would involve a great expenditure; the amount as of this date undetermined. It is anticipated that expansion and development of a "work-shop" training course under the auspices of the Dental School of the University of North Carolina is the only immediate and temporary solution. The development of an incentive scholarship program is another avenue provided accredited training courses could be found.

It is the conclusion of those concerned that continued development of the dental hygienist program will be of unparalleled assistance in the field of public health. With the increase in the number of trained dental hygienists will come a reduction in the salaries which they presently command. (\$600. to \$700. per month) The General Assembly of 1965 made a considerable appropriation to implement the training of dental hygienists.

The three schools presently training dental assistants are to be complimented on their programs. The need for trained dental assistants is pressing, and it has been recommended by those present at the April 16, hearing that two more schools should be opened, the location being determined by the Department of Community Colleges with the cooperation of the North Carolina Dental Society. At this time, there appears to be no critical shortage of dental laboratory technicians and the present program at the Durham Technical Institute is performing competent service.

The training programs in these fields, dental laboratory technicians, dental assistant education, dental hygienist education are new. Their expansion is necessary to the health and welfare of the people of North Carolina. They are only able to train the necessary personnel as qualified instructors in the fields become available. The education and training of

these instructors is the polestar for the proper solution.

The burden for proposing these training programs for instructors lies with the North Carolina Dental Society, University of North Carolina School of Dentistry, the University of North Carolina School of Education and the Department of Community Colleges as well as the General Assembly of North Carolina when such programs are proposed.

These conclusions are in no way meant to limit the proposals for the solution of the problem of the increasing need for dental care.

Thomas W. Seay, Jr.

Fred M. Mills, Jr.

Appendix D

April 16, 1966 - MINUTES ON DENTAL PHASE OF A HOUSE RESOLUTION
DIRECTING THE LEGISLATIVE RESEARCH COMMISSION TO STUDY SHORTAGES
IN MEDICAL PROFESSIONS.

Senator Thomas Seay, Chairman
Senator Fred Mills, Co-Chairman

Senator Seay presided at the meeting which was held
April 16, 1966 at 9:30 a.m. in Room 1118 of the Legislative Building. Senator Seay opened the meeting by explaining to those present the motive behind the meeting and the duty of the Commission to report to the 1967 General Assembly with a recommendation on the Resolution.

Dr. E. A. Pearson, Jr., Director, Dental Division State Board of Public Health, introduced Dr. James W. Bawden, incoming Dean, Dental School, University of North Carolina.

Dr. Bawden: Our primary responsibility at the University is dealing with the dental manpower needs of the State from the standpoint of education. The Dental School is the fountainhead of our source. It is important that we have the opportunity to discuss our problems with you.

What is the dental manpower situation in this State?
The situation is critical. At the present time, the profession is barely meeting the demand, not the need for dental health. A greater and greater percentage of the people are going to demand dental health care because of the rise in our economy and the general affluence of society. Also, our population is increasing. About

40% of the population across the country receive dental health care. Of this 40%, one-half or less get adequate care but this picture is rapidly changing, because of Union Dental Health plans, Dental Insurance programs (pre-paid) and Federal Programs. Recent legislation proposed will involve 30 to 40 million children between the ages of 2 and 6. This will have a tremendous impact on the situation. All these things combined will probably raise this demand factor of 40% to 70% or 80%.

There are 6 approaches for meeting this situation.

- (1) Educate more dentists.
- (2) Increase the productivity of the dentist by increasing the auxiliary dental personnel. Educate dentists to use dental auxiliaries.
- (3) Educate people to the cause of tooth disease and to use the preventive measures available.
- (4) Research to control the incidence of disease.
- (5) Continuing education of the practicing dentist. The man in the field must have the opportunity to come back to an environment where he can update his profession.
- (6) Graduate training to provide specialty training and to train teachers and those in research.

What is the School's approach to these problems?

- (1) The University of North Carolina Dental School is listed fourth best in the nation. At the present time, our class is 50 a year. The Dental School since its opening and through

1965 has graduated 530. Seventy-one percent are located in North Carolina; 15% go into the Armed Services. However, we think a good percentage of these return to North Carolina. We are now in the process of expanding our facilities to accommodate 75 students. Further expansion at this time is economically impossible. As it is we had to cut back the original plans of our new clinical and basic science wings because of the rise in construction costs from the time of planning to actual construction. The complete top floor had to be eliminated, limiting expansion in dental auxiliary training, auxiliary teachers' training program, continuing education of the practicing dentist and graduate training programs.

- (2) We are training at maximum now in the field of auxiliary dental personnel without further expansion. Dental auxiliaries can increase effectiveness of a dentist as much as 100% if the dentist is trained to use auxiliary. Average increase in effectiveness is 50%. The present population ratio of 4,000 to 1 dentist will be considerably higher unless there is expansion.
- (3) Research is our one ace in the hole. Research will help reduce this demand factor. There have been exciting developments recently. The North Carolina Dental Society provided \$350,000 so we could obtain Federal funds for a

new Research Building. This was a gift to the State of North Carolina. The State does not provide any funds for this purpose, and we must rely on Federal funds. This building is already 80% committed and is a year away from completion.

- (4) Preventive education plays an important part in reducing the incident of disease. Research provided us with fluoridation and education is necessary to see that this preventive measure is used; also, topical application (8% stannous fluoride, remaining solution distilled water). Thirty-one percent of the population in the State is drinking treated water. Greensboro is the only large town left in North Carolina not treating water. This process reduces cavities by half. When it is not possible to economically fluoridate the water (rural areas), the populace can be educated in the preventive topical application. It must be stressed again that practicing dentists must be educated to new research. This should be an important part of the curriculum of the Dental School.

We agree that Community Colleges are where the auxiliaries need to be trained, but we have to be the source of the teachers. You cannot have an approved school with substandard faculty.

We need the facilities restored to the original plan of our clinical and basic science wing in order that training may be

offered to those who will teach in our community colleges. Our present facilities will not meet this critical shortage in instructors for our auxiliary programs in the community colleges. The University is where these people turn for help in solving this situation and rightly so.

Dr. E. A. Pearson, Jr., Director, Dental Division State Board of Public Health.

Dr. Pearson: I would like to thank you for the opportunity of speaking to you and I hope to give you the needs from the public health viewpoint.

There are 700,000 children in grades 1 through 6 in North Carolina. Six counties have dentists on the staff of the local Health Department. There are 140,000 children in grades 1 through 6 in these 6 counties, the remaining 560,000 depend upon the Division of Dental Health for their Dental Public Health programs. Of the 560,000, 140,000 of these children are classified as medically indigent, and are eligible for dental care services which are provided by the State Board of Health. Of these 140,000 eligible for care under our program, only 25 to 30 thousand are receiving any service at all because we are not adequately staffed. We do into only 46 counties. One hundred and ten to 115,000 children are in need of service. One dentist does some work on about 1700 children per year. On this basis 85 to 90 staff dentists are needed to

provide partial dental care. Our work is different from that of a regular dentist in that we have to arrange our schedule around the school day.

Our formula is changing, we are now trying to educate these medically indigent children in the prevention of tooth decay. We can accomplish a far greater service to the people of the State by educating people in the importance of prevention. For our job of demonstrative teaching last year, we employed 23 dentists. This involves referral of the child who is in need of care, etc. We have just recently become involved in planning programs for other people. Rowan County is the first in North to set up a dental program for the chronically ill and aged. We have had requests to help elsewhere in the State, but funds are not available and where funds are available, no personnel. Education, referrals, follow-ups, topical care should be given to the Junior and Senior High School students of this State. This demand is great but we do not have the manpower to provide such care. There is an actue shortage in Public Health Dentists. Until recent years Public Health Departments have not thought of using dental hygienists and, of course, it has been just recently that dental hygienists were available. This concept has changed and in public health work there is a place for dental hygienists in the promoting of dental health programs. Were they available and the private needs of the dental profession satisfied, I

believe we could provide more services by using dental hygienists. (A dental hygienist scales teeth, takes X-Rays, applies topical application and has a good scientific background as to the health needs of the body).

We are using every means to attract personnel to this field, going into the high schools and getting students to devote time to helping in dental education. Dental hygienists can be used to fill the gap in the shortage of Public Health dentists.

(There was general discussion as to attracting personnel and in response to a question from Senator Seay, it was agreed by all that this is no problem. The problem is the critical shortage in instructors to teach these courses in the community colleges.)

Dr. John T. Fulton, Department of Epidemiology, School of Public Health, University of North Carolina.

Dr. Fulton: The Public Health School at Chapel Hill is a graduate school. Twenty-five percent of its budget comes from State funds; most of our budget comes from Federal funds. We are very much concerned and have been for years in the increased need for public health dentists. Also, the increasing need for preventive medicine.

There are many aspects to this situation. The man who goes into Dental Public Health Service must be selected carefully, and necessarily have a high scholastic rating. It is expensive in comparison to salaries paid. Public Health Service is a surveillance service of the private industry. Though we do have

scholarships under the Federal Training Program, at the moment we have funds to support 5 and we have 15 applicants.

Dr. William B. Oliver, Chairman, Dental Assistants Committee,
North Carolina Dental Society

(Report attached - Exhibit 1)

(Appendix F)

Dr. Oliver added to the report that again the critical problem is obtaining instructors for the two new schools proposed. (A dental assistant takes X-Rays, apply topical application and works with the dentist)

Dr. J. Harry Spillman, Chairman of the Dental Hygienists Committee,
North Carolina Dental Society.

(Report attached - Exhibit 2)

(Appendix G)

In the discussion that followed relative to shortage in instructors, Dr. Spillman advised that retired Army personnel had been a source of instructors. Their Army retirement pay supplements the low salary scale paid by the community colleges. The Schools are accredited by the American Council on Dental Education of the American Dental Society. There are three types of accreditation: Primary provisional (before class starts); provisional (after the class starts); and full accreditation. If these schools operate with substandard faculty, they cannot be accredited. If they are not accredited, they lose federal money. Students can now take State Boards from schools having primary provisional accreditation. North Carolina is the first state to start dental auxiliary training.

Other states recognizing this need use our plan in North Carolina as a pattern. There are no private institutions in the State contemplating operation of dental schools or dental auxiliary schools. University of North Carolina was the first school in the nation to operate a workshop for dental auxiliary instructors.

The Dental Assistants School at the Technical Institute of Alamance is the only fully accredited school for dental assistants. The other two have provisional accreditation. The three Dental Hygienists Schools are operating under provisional accreditation. The Laboratory Technology School at Durham Technical Institute is operating under full accreditation.

Dr. Colin P. Osborne , Chairman, Dental Laboratory Technicians Committee, North Carolina Dental Society.

Dr. Osborne: We are proud of the Durham Technical Institute. It is performing a real service to the dental profession of this State. We started this school with opposition from the North Carolina Dental Laboratory Association, but relations have improved considerably. Since this field is fairly new to the profession, we feel the school can handle the number of students they are now attracting. We are meeting the demand so far in the State.

(Discussion here as to the value of the school training over on-the-job training, and it was the general concensus that technicians were better trained and progressed at a more rapid rate when they attended school. At school they also have the advantage

with the dentist, which they do not have when they work in job training laboratories.)

Mr. John Kerr, Director, Health Careers for North Carolina

(Report attached - Exhibit 3) (Not included in appendix)

Mr. Kerr added to his report by saying that they go directly to the high schools and work with the counselors and students. We try to encourage them to write for literature and investigate scholarships. There has been a 30% increase in applications for health careers since the formation of Health Careers for North Carolina.

Miss Miriam Daughtry, State Supervisor, Health Occupations Dept. of Community Colleges.

(Report attached - Exhibit 4) (Appendix H)

Miss Daughtry felt more could be done toward attracting personnel to the field of dental assistants. Dental hygienists command a salary of from \$600. to \$700. per month in comparison to \$200 for the dental assistant. It was believed that the salary of the dental hygienist would eventually adjust itself when the demand is met, and the services of trained dental assistants will be in more demand when the benefit of their assistance is better known and more dentists are trained to use a dental assistant.

There being no further business the meeting was adjourned at 1:45 p.m.

Thomas W. Seay, Jr. Chairman

Patricia A. Benton, Secretary

Fred M. Mills, Jr.

THOSE PRESENT AT THE APRIL 16, 1966 HEARING ON SHORTAGES OF
DENTAL PERSONNEL IN THE STATE.

Miss Miriam Daughtry, State Supervisor, Health Occupations,
Department of Community Colleges, Raleigh, N. C.

Dr. Colin P. Osborne, Chr., Dental Laboratory Technicians
Committee, N. C. Dental Society, Medical Arts Bldg. Lumberton, N. C.

Dr. James W. Bawden, School of Dentistry, University of N. C.,
Chapel Hill, N. C.

Dr. John T. Fulton, Dept. of Epidemiology, School of Public
Health, University of N. C., Chapel Hill, N. C.

Dr. E. A. Pearson, Jr., Director, Dental Health Division, N. C. State
Bd. of Health, Raleigh, N. C.

Dr. William H. Oliver, Dental Assistants Committee, N. C. Dental
Society, Smithfield, N. C. - Chr. of Committee

Mr. John T. Kerr, Director, Health Careers for N. C., P. O. Box 10937,
Raleigh, N. C.

Dr. J. Harry Spillman, Chr., Dental Hygienists Committee, N. C.
Dental Society, 140 Lockland Ave., Winston-Salem, N. C.

Dr. Riley E. Spoon, Professional Bldg., Winston-Salem, N. C.

Appendix E

Report of Dean James W. Bawden on the Dental Education Wing at the School of Dentistry, University of North Carolina at Chapel Hill

The Dental Education Wing, to be constructed as an addition to the present School of Dentistry at the University of North Carolina at Chapel Hill, was originally planned as a four-story, 110,000 square foot structure. The construction of this facility was planned to provide for initiation or expansion of various programs as follows:

1. Increase in D.D.S. class size. The new building will provide the resources to increase the size of the yearly dental class from 50 to 75 students. This 50% increase in enrollment is of extreme importance in meeting the need for dentists in the state of North Carolina. Approximately 75% of the structure was designed in direct support of expansion of the D.D.S. program.
2. Increase in dental hygiene enrollment. The new building would permit an increase in the dental hygiene enrollment from 15 to 60 students per class. This four-fold increase is necessary in order that the School of Dentistry may continue its present level in training of dental hygienists, and also initiate a substantial program in teacher training for instructors in dental hygiene. The University of North Carolina is the only facility in the state which can train teachers of dental hygiene to staff existing and projected dental hygiene programs in community colleges and vocational schools throughout the state.
3. Development of dental assisting program. The dental teaching wing is designed to permit the development of a dental assistant training program oriented in the direction of teacher training. As in dental hygiene, the University of North Carolina is the only institution in

the state which can properly train dental assistants to teach in the various dental assistant training programs throughout the community college and vocational school system in North Carolina. Increased facilities would allow an increase in the number of students in the assistant program thus insuring an adequate base for teacher training activities.

4. Expansion of continuing education programs. Facilities are to be provided for a most significant expansion in the continuing education programs conducted by the School of Dentistry for the dental practitioners in this state and region. The programs currently conducted by the School of Dentistry have an excellent reputation on a national basis and are heavily attended. However, limitations on space and facilities which now exist preclude any further development of such programs. The new building would provide the much needed resources to conduct programs which are necessary to meet the needs of the profession in North Carolina.
5. Expansion of graduate training. The new structure was designed to permit an increase in the number of graduate students engaged in specialty and research training from 15 to 60 students in residence each year. The critical need for properly trained specialists in North Carolina has been well documented and the program at the School of Dentistry is the state's major resource in meeting this need. These graduate programs also provide the teachers to staff this school, dental schools in the southeast, and institutions throughout the entire nation.

To construct this facility a grant was applied for and obtained from the U. S. Public Health Service under Public Law 88-129 (Health Professions Educational Assistance Act). The federal grant received was in the amount of \$1,546,049.

A state appropriation of \$2,293,951 was then made to provide total funding of \$3,840,000 for the project. Design development drawings proceeded on the basis of this funding and in accordance with preliminary designs and commitments included in the federal grant.

It soon became apparent that the funds in hand were insufficient to construct the building as originally designed. The reasons for insufficient funding to construct the building as originally planned are twofold:

1. A dental clinical structure of this type is an enormously complex and expensive building. State agencies habitually underestimate the square foot cost of such construction and the recommended budget for the building was deficient from the very beginning.
2. Construction costs in the research triangle area are estimated to be increasing at the rate of 1% per month. The considerable delay in time from the first schematic drawings submitted in support of the grant application to the time when bids are taken for the contract permits a marked escalation in construction costs. An already deficient budget was rendered even more unrealistic due to this cost squeeze.

After careful consideration, the administration of the School of Dentistry recommended to the University Administration that the situation be anticipated and that the building be reduced in size to a three-story, 88,000 square foot structure. It was pointed out that such a building could realistically be planned on the basis of existing funds. The University Administration concurred in this decision and subsequent Trustee action and action by the State Department of Administration has resulted in the suggested reduction.

The decision to reduce the project in size required that certain facilities and programs be eliminated from the plans. Since the federal grant was awarded

entirely in support of the expansion of the D.D.S. program, and considering that it was of extreme importance that the federal grant remain in tact, it became necessary to make reductions at the expense of all programs other than the D.D.S. curriculum. This meant that any expansion of the dental hygiene class was eliminated, proposed expansion of the dental assisting program was cut back, all new facilities for continuing education were eliminated, and a significant reduction in the graduate programming was indicated. These changes in design and function have proceeded through approval by the USPHS without any change in federal support for the project and all funding is in tact. Working drawings for the 88,000 square foot structure are in progress and are to be completed by the end of January.

So important to the health and welfare of the people of North Carolina are the functions which have been eliminated from the project, that steps were immediately taken to provide for restoration of the building to its original design and function. The reasons for this concerted effort are clear:

1. The critical shortage of dental hygienists in the state of North Carolina demands that the School of Dentistry continue its present level of dental hygiene education, expand this program if possible, and put major emphasis on a teacher training program to provide instructors for other dental hygiene programs throughout the state and region.
2. In the field of dental assisting it is absolutely necessary that all resources be developed in the training of dental assistants, and that the University provide properly trained teachers for dental assistant programs in North Carolina and the southeast.
3. In the face of the rapid advancement of scientific knowledge and technique, it is mandatory that the continuing education programs

in the School of Dentistry be greatly expanded. The University provides the only major source of continuing education for the dental profession in North Carolina.

4. The need for graduate training in the specialty areas of dentistry is of a very critical nature in this state.

With consideration for these needs, it is estimated that an amount of \$1.1 million will be required to permit construction of the fourth floor of the dental education wing, thus restoring the project to its original size and scope. The school would then be in a position to provide the various programs listed above which are so necessary in meeting the health needs of the population.

It was also determined that the project is likely to be bid about May 1, 1967, or, about one month prior to legislative appropriations. It is planned that working drawings for the fourth floor, to include all of the programs which have been tentatively eliminated from the project at this time, are to be completed and bids are to be taken on this portion of the building as an "alternate additive." If the state appropriation is made in early June, and funds are made available for the fourth story, the contractor could pick up the alternate bid and proceed with construction of the building as a unit. It is the firm opinion of the administration of the School of Dentistry that such an approach will provide for the most efficient and effective use of state funds. The building will be constructed as a unit with the various components arranged in the most useful manner. The construction of the fourth floor according to this plan would also result in the minimum square foot cost.

Agreement by the University and the Department of Administration to permit the architect to complete working drawings of the fourth floor required that an underwriting fee of approximately \$35,000 be provided to the architect in the event that state appropriation was not realized. The School of Dentistry

secured, from its operating budget, approximately \$15,000 and then turned to the dentists in the state with a request for the remaining \$20,000. Working through the Dental Foundation of North Carolina, the profession responded in a most commendable way by subscribing nearly \$33,000 to the project. The School of Dentistry has committed only \$20,000 of this money to the program with the oversubscription serving as security. This expression of support by the profession not only permitted the working drawings for the fourth story to proceed but also is another example of the dental profession's continuing and major support of programs at the University of North Carolina. Three hundred dentists in North Carolina participated in this pledge drive. This effort was over and above the \$320,000 which the Dental Foundation has already provided for construction of the Dental Research Building.

The way is now clear for construction of the Dental Education Wing as originally planned, to include all of the programs regarded as absolutely necessary in meeting the health needs of the people. If the state appropriation of \$1,100,000 is made, the building will be constructed in the most efficient and economical manner and should permit the University to provide the educational leadership and resources to meet the demands of the dental health problem.

In summary, it should be emphasized that inclusion of teacher training programs in dental hygiene and dental assisting serves as the basis for every dental assistant and hygiene training program throughout the state of North Carolina. At the present time, the number of individuals who are properly trained to teach in these programs in the various communities in North Carolina is very limited and precludes proper development of such programs. The School of Dentistry is the only resource in the state which can properly train these

teachers and without such a program there is little chance that the auxiliaries, which are so vitally important to meeting the health manpower needs, can be trained in adequate numbers. The programs in the various community college and vocational schools depend directly on the funding of the fourth floor of the Dental Education Wing. It should be mentioned that a grant application of \$319,000 has been submitted to the W. K. Kellogg Foundation to develop auxiliary teacher training programs in conjunction with the community colleges and other institutions. The situation with regard to continuing education is equally as important. Without the additional facilities the practitioners in this state will have extreme difficulty in keeping pace with the new knowledge and techniques which they should be assimilating and utilizing to the most effective treatment of their patients. The appropriation of the \$1,100,000 in the scope of a project which would total nearly \$5,000,000 is a critical amount of money which would permit the School of Dentistry to approach the problem of dental health care in a comprehensive and effective way. Failure to appropriate these funds will most certainly lead to a severe problem with regard to the health and welfare of the citizens of North Carolina.

Appendix F

NORTH CAROLINA DENTAL SOCIETY DENTAL ASSISTANTS COMMITTEE

William H. Oliver, Chairman

T. S. Fleming
Charles H. Sugg

O. J. Freund
Gerald F. McBrayer

Meetings: This committee has not met since its appointment February 16, 1966.

Assignments: This committee was appointed by President Roberts to study, analyze and suggest progress of dental assistant training programs. Up to this time, one member of the Society has served as liaison with the dental assistants. Because the committee was appointed late in the administrative year, only the groundwork could be laid before the annual meeting.

Results of Preliminary Study: The following data has been compiled from information received from schools offering dental assistant training programs.

Wayne Technical Institute, Goldsboro: A course in dental assisting was begun in August, 1963. As of March 25, 1966, approximately 34 students have been graduated. There are now 20 students in training. The maximum capacity of each class is 12, but it is understood that the school could accommodate 18, if necessary. Of the 34 graduates, 20 are presently employed and 16 have passed the examination of the Dental Assistant Certification Board. The one-year program is provisionally approved by the ADA Council on Dental Education.

Technical Institute of Alamance, Burlington: The first class began training in September, 1962. To date approximately 33 students have been graduated. The maximum capacity of each class is 12, and the program is operating at maximum capacity. The program is fully approved by the ADA Council on Dental Education.

Central Piedmont Community College, Charlotte: The first class entered in September, 1964, and to date one class of 9 students has been graduated. The maximum capacity of each class is 20 and 20 students are currently enrolled. This one-year program has been provisionally approved by the ADA Council on Dental Education.

UNC School of Dentistry, Chapel Hill: Information on the dental assistant training program at the UNC School of Dentistry has not been obtained.

Conclusion: The committee feels that with the basic information received, the number of dental assistants being graduated is far inadequate to meet the demands of the dentists of North Carolina. Even with the basic equipment cost of \$35-40,000 per school, the committee feels that at least 2 or more schools are needed. The location of the schools can be determined only after a survey of individual dentists is conducted.

Resolutions

This report is informational in nature and no resolutions are presented.

Action by House of Delegates:

Appendix G

NORTH CAROLINA DENTAL SOCIETY DENTAL HYGIENISTS COMMITTEE

A Report on Current Status of Schools of Dental Hygiene and Estimated Future Needs

In answer to a request from The Executive Committee of the NCDS, the Dental Hygienists Committee of The NCDS is submitting this report as an attachment of its final committee report.

There are at present two Schools of Dental Hygiene operating in the State; The School at Chapel Hill with an annual enrollment of approximately fifteen and The School at Central Piedmont Community College with an annual enrollment of thirty-five to forty girls. In March, The School at Wayne Technical Institute in Goldsboro, will begin with an initial enrollment of seventeen girls, but this will be raised to between twenty and twenty-five this fall. We have learned that the Program in Dental Hygiene at Guilford Technical Institute in Jamestown, N. C. has received its final approval and will begin its first program this spring. Their enrollment will be sixty girls for the first two year period and approximately twenty girls per year after that.

Our Committee has received a letter from The Dean of The Dental School at Chapel Hill in which he states that due to unexpected accelerated construction costs, the dental hygiene classes there will remain at the current level for the foreseeable future. Also, the plans at Chapel Hill are to place increasing emphasis on the training of students for the Bachelors Degree (four years) in order to meet the demands for teachers in dental hygiene schools.

At the current levels of enrollment and allowing for normal attrition, the four schools should graduate approximately eighty to one hundred dental hygienists per year.

Our Committee feels that for the immediate future, additional schools of dental hygiene should be discouraged. However, we feel that after all these schools have graduated their first classes, a reevaluation of needs be made. If this further study indicates that the needs are not being met, then consideration should be given to starting additional schools, or increasing the size of classes at the existing ones.

Respectfully submitted,

J. Harry Spillman, DDS

Chairman

Dental Hygienists Committee

(2) Plan to expand classroom laboratory space to admit 28 students for the first year class in the fall of 1966.

f. Cost of Equipment - \$65,090.00 (State funds). Federal funds are not available for this type of program.

g. Operating Cost - 1964-65

Expenditures: (approximate)

Supplies	\$ 9,288.97
Travel	471.58
Consultants' Fees	50.00
Salaries	<u>15,530.06</u>
	\$25,340.61
	- <u>7,053.37</u> (Inventory)
Total	\$18,287.24

The inventory of supplies, June 30, 1965; dental gold, platinum, semi-precious metals, and precision attachments \$2,490.25. Other instructional supplies on hand \$4,563.12. This shows a gross inventory of \$7,053.37. This subtracted from \$25,340.61 shows a gross expenditure of \$18,287.24. This large inventory is a result of quantity buying which is necessary to enable us to get the best prices. In the case of the gold and other metals, we have a reclamation factor which amounts to approximately 90 per cent of the expenditure.

C. Summary

DURHAM TECHNICAL INSTITUTE PROGRAM OF DENTAL LABORATORY TECHNOLOGY IS ONE OF THE FIVE PROGRAMS IN THE UNITED STATES THAT IS ACCREDITED BY THE COUNCIL ON DENTAL EDUCATION, AMERICAN DENTAL ASSOCIATION. The quality of the program is demonstrated by this accreditation.

The Local Advisory Committee is composed of local dentists, teachers from the University of North Carolina School of Dentistry, dental technicians and educators. This is a very active Committee which gives active support to this program.

The University of North Carolina School of Dentistry students work with the Durham Technical Institute Dental Laboratory students as a team for a part of their curriculum.

The Durham Technical Institute has planned a workshop, April 21 and 22, 1966, in cooperation with the University of North Carolina School of Dentistry for practicing dental laboratory technicians.

This type of educational program does not seem to be well known to the people of North Carolina at present; therefore, the Sub-committee for Dental Laboratory Technology of the State Advisory Committee for Education of Dental Auxiliary Personnel feels that the one program currently operating at Durham Technical Institute be the only one sponsored by the Department of Community Colleges' system for the next biennium.

Should the demand by North Carolinians for education in this field be increased, priority for admission into the program will be given to these persons.

It is anticipated for the near future that approximately 25 students should graduate from this program each year.

II. DENTAL ASSISTANT EDUCATION - 1 year program

A. Need - There are approximately 1,500 practicing dentists in North Carolina. It is estimated that 10 per cent of the practicing dentists would require new dental assistants each year, and in addition, there will be about 60 new dentists each year; therefore, the approximate total need per year of dental assistants would be 200. This demand is expected to be increased during the next five years. (Dental Assistant Sub-committee of State Advisory Committee for Education of Dental Auxiliary Personnel.) There are approximately 72 dental assistant students being graduated annually.

B. Programs in Progress - 3

TECHNICAL INSTITUTE OF ALAMANCE BURLINGTON, NORTH CAROLINA

a. Established September 1961 (one class per year)

b. Graduated - August 1962 - 11
August 1963 - 8
August 1964 - 11
August 1965 - 12

42

c. Follow-up - 37 replies out of 42; 73 per cent working as dental assistants in North Carolina. (Statistics from the Technical Institute of Alamance.)

d. Present Enrollment - 12 to graduate in August 1966.

e. Class Capacity - 12 plus 6 in new building (1967).

f. Cost of Equipment - \$37,341.00 (1/2 Federal and 1/2 State funds).

g. Operating Cost - 1964-65

Expenditures: (approximate)

Supplies	\$ 2,011.50
Salaries	<u>10,297.30</u>

	\$12,308.80
-	<u>2,224.00</u> Dental Services

Total	\$10,084.80
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WAYNE TECHNICAL INSTITUTE
GOLDSBORO, NORTH CAROLINA

a. Established September 1963 - three classes admitted for the year of 1964; two classes per year thereafter, in June and September.

b. Graduated - August 1964 - 7
February 1965 - 6
June 1965 - 9
August 1965 - 7

29

c. Follow-up - 9 unknown, 20 working as dental assistants; 4 of these working out-of-state. (Statistics from Wayne Technical Institute.)

d. Present Enrollment - 19 (9 to graduate in May 1966 and 10 in September 1966).

e. Class Capacity - 12 (classes admitted in June and September - 24 per year).

f. Cost of Equipment - \$37,799.00 (1/2 Federal and 1/2 State funds).

g. Operating Cost - 1964-65

Expenditures: (approximate)

Supplies (instructional and office)	\$ 3,116.45	
Travel	922.73	
Consultants' Fees	2,895.00	
Salaries	17,107.76	
Related Classes	<u>2,100.55</u>	
	\$26,142.49	
	- <u>531.00</u>	Dental Services
Total	\$25,611.49	

CENTRAL PIEDMONT COMMUNITY COLLEGE
CHARLOTTE, NORTH CAROLINA

- a. Established September 1964 - admitted one class of nine.
- b. Graduated - August 1965 - 6
- c. Follow-up - the six graduates are working in North Carolina.
- d. Present Enrollment - 25 (13 to graduate August 1966 and 12 in December 1967).
- e. Class Capacity - 16 (classes admitted September and December - 32 per year).
- f. Cost of Equipment - \$27,680.00 (1/2 Federal and 1/2 State funds).
- g. Operating Cost - 1964-65

Expenditures: (approximate)

Supplies	\$ 1,907.00 (for 6 students)
Travel	150.00
Consultants' Fees	1,640.00
Salaries	<u>10,760.00</u>
Total	\$14,457.00

C. Summary

Total 1964-65 graduates - 58, total per year class capacity - 74. These figures do not include short-term programs at the University of North Carolina, Chapel Hill.

There are plans for a MDTA dental assistant program at Guilford Technical Institute, Jamestown, North Carolina (anticipated enrollment of 40 for this one-year class).

The Sub-committee for Dental Assistant Education of the State Advisory Committee for Education of Dental Auxiliary Personnel recommended that two new dental assistant programs be established in the next biennium-- one in the far western part of the State where there are no programs at present and the other in an area where a survey of potential vacancies determine it is most needed. Since there is already a dental auxiliary education program at the Durham Technical Institute, this institution should be considered so that equipment, teaching staff, and existing facilities could be used,

I. DENTAL HYGIENE EDUCATION - 2 year program

A. Need - No recent figure except the 1964 Survey by North Carolina Dental Society which is not valid at present. There are approximately 125 practicing dental hygienist in North Carolina.

B. Programs in Progress - 3

CENTRAL PIEDMONT COMMUNITY COLLEGE
CHARLOTTE, NORTH CAROLINA

a. Established September 1965 - 1 class per year

b. Graduated - none (August 1967)

c. Follow-up - none

d. Present Enrollment - 35 (38 admitted in September 1965)

e. Class Capacity - 40

(1) First year students - 40

(2) Second year students - 40

80

f. Cost of Equipment - \$66,579.00 (1/2 Federal and 1/2 State funds).

g. Operating Cost - 1965-66 (not available)

WAYNE TECHNICAL INSTITUTE
GOLDSBORO, NORTH CAROLINA

- a. Established March 1966
- b. Graduated - none (February 1968)
- c. Follow-up - none
- d. Present Enrollment - 11 (30 to be enrolled September 1966)
- e. Class Capacity - 30
 - (1) First year students - 30
 - (2) Second year students - 3060
- f. Cost of Equipment - has not been purchased. Standard estimate \$65,181.10. (Some equipment can be used in conjunction with the Dental Assistant program.)
- g. Operating Cost - March 1966 (reflected in Applied Courses only for the Spring Quarter).

GUILFORD TECHNICAL INSTITUTE
JAMESTOWN, NORTH CAROLINA

- a. Established April 12, 1966
- b. Graduated - none (April 1968)
- c. Follow-up - none
- d. Enrollment - plans are to admit 60 students within the next year.
 - (1) April 1966 - 20
 - (2) July 1966 - 20
 - (3) October 1966 - 20
- e. Cost - funded by the federal government through the Manpower Development and Training Act. First and only Dental Hygiene Education program in the United States to be financed by MDTA. Present contract for this money terminates October 1968.

C. Summary

Three Dental Hygiene Education programs total class capacity for 1965-66 equals 130. (This figure does not include the Dental Hygiene program at the University of North Carolina, Chapel Hill, North Carolina, which admits fifteen students per year.)

The Sub-committee for Dental Hygiene Education of the State Advisory Committee for Education of Dental Auxiliary Personnel were of the general opinion that the four established programs should provide adequate numbers of qualified dental hygienist for future needs of North Carolina.

immediate